Appln. No.:

10/574,595

Amendment Dated:

April 3, 2009

Reply to Office Action of: January 6, 2009

Remarks/Arguments:

Claims 1-8 and 10-23 are pending in the application. Claims 1-8, 10, 11 and 13-23 are allowed. Claim 12 is rejected. Claims 12 and 22 have been amended.

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Claim 22 is objected to because it depends on cancelled claim 9. Thus, Applicants have amended the dependency of claim 22 to depend on independent allowed claim 1. Withdrawal of the objection is respectfully requested.

On page 4, the Official Action rejects claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. Patent No. 7,103,371) in view of Mano (U.S. Patent No. 6,778,586) further in view of Sugaya (U.S. 2004/0053621). It is respectfully submitted, however, that the claims are patentable over the art of record for at least the reasons set forth below.

Applicants' invention, as recited in claim 12, includes a feature which is neither disclosed nor suggested by the art of record, namely:

> ... the second radio communication device gives notice of the collision ... when the number of collisions ... is more than or equal to a prescribed number of times ...

> ... when the number of detected collisions is less than the prescribed number, the second radio communication device stops giving notice of its transmission prohibited time slots transmission permitted time slot, the prescribed number is at least two ...

Claim 12 relates to providing or not providing notification of collision depending on how many collisions occur. The device gives notice when the number of collisions is more than or equal to a prescribed number. Also, the device stops giving notice when the number of collisions is less than the prescribed number. Specifically, the prescribed number being at least two. Support for this feature can be at least found on page 46, lines 10-20 and page 48, lines 1-10 of the specification. No new matter has been added.

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Sugaya teaches a system where notification of collision is given when a single collision occurs (number of collisions is one). Furthermore, when there is no collision (the number of collisions is zero) than Sugaya does not give the notice of collision. This feature is at least supported in Sugaya's paragraph 49 ("a collision detection step for detecting whether beacon information of the local network collides with beacon information of another network ... and an interference informing step for notifying a control station of the local network of a beacon information collision detection"). This feature is furthermore illustrated in Sugaya's Fig. 5. In Fig. 5, the beacon preceding superframe 511 and the beacon preceding superframe 521 collide with each other. Piconet #2 is then notified of the collision by a message sent in time slot M of superframe 522. Piconet #2 then adds a delay to superframe 524 in order to offset the beacons so that they do not collide from that point forward. Thus, Sugaya's system teaches notifying on every collision (Sugaya's prescribed number for notification of collision is equal to 1).

Applicants' claim 12 is different than the art of record because the prescribed number for notification of collision is at least equal to 2 (" ... when the number of detected collisions is less than the prescribed number, the second radio communication device stops giving notice of its transmission prohibited time slots or its transmission permitted time slot, the prescribed number is at least two ..."). Applicants' system counts the number of collisions as illustrated by collision counter 1501 in Fig. 15. The number of collisions is compared to a prescribed number that acts as a threshold. Specifically, when the number of collisions are greater than or equal to the prescribed number, then notification of collision is given. When the number of collisions is less than the prescribed number then notice of collision is not given. This feature is at least supported on page 46, lines 10-20 and on page 48, lines 1-10 of the specification ("when the counter value of the collision counter 1501 is less than the predetermined number of times, for example, not more than or equal to 10 times ... information generation unit 207 ends the processing"). Thus, at least two collisions must occur before notice of collision is given. Therefore, Applicants' claim 12 is different than Sugaya, because Applicant's prescribed number of collisions must be at least equal to two, whereas Sugaya's prescribed number is equal to one (he provides notification on every single collision). Accordingly, for the reasons set forth above, claim 12 is patentable over the art of record.

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Niether Sugaya, Liu, Mano or their combination suggest the features of Applicants claim 12. Thus, the combination of these references is deficient.

In view of the amendments and arguments set forth above, the aboveidentified application is in condition for allowance, which action is respectfully requested.

espectfully submitted,

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